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63	2	("6100037").PN.	USPAT;	2003/06/24 16:44
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	, 3		US-PGPUB;	
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### (FILE 'HOME' ENTERED AT 16:51:16 ON 24 JUN 2003)

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          62816 S PHOSPHODIESTERASE?
L1
L2
            591 S L1 AND PDE1? OR PDEXV
            242 DUP REM L2 (349 DUPLICATES REMOVED)
L3
             17 S L3 AND PDE11?
L4
             17 SORT L4 PY
L5
              1 S L1 AND PDEXV
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     ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
L6
     2001:207980 CAPLUS
AN
DN
     134:248839
     Protein and cDNA sequences of a novel human cyclic nucleotide
TI
     phosphodiesterase PDEXV (PDE11A3) and uses thereof in
     therapy and drug screening
SO
     Eur. Pat. Appl., 44 pp.
     CODEN: EPXXDW
IN
     Fidock, Mark David; Robas, Nicola Melanie
     This invention provides protein and cDNA sequences for a newly identified
AΒ
     human cyclic nucleotide phosphodiesterase, designated
     PDEXV (PDE11A3), which is believed to be a truncated version of
     PDE11A1. The invention further relates to methods for utilizing
     PDEXV in drug screening assays and in therapy directed against
     diseases assocd. with inappropriate PDEXV activity or levels.
                    KIND DATE
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                            20010509
     EP 1085089
                      A3
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AN
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     Phosphodiesterase PDE11A splice variants from human
     and rat
SO
     PCT Int. Appl., 77 pp.
     CODEN: PIXXD2
     Omori, Kenji; Yuasa, Keizo; Kotera, Jun; Oda, Kotomi; Michibata, Hideo
IN
     Cyclic nucleotide phosphodiesterase 11A (PDE11A)
AB
     splice variants from human and rat, their cDNAs, recombinant expression, antibodies, and use in screening of inhibitors, are disclosed.
     CDNAs encoding a novel phosphodiesterase,
     phosphodiesterase 11A (PDE11A), were isolated by a
     combination of reverse transcriptase-polymerase chain reaction using
     degenerate oligonucleotide primers and rapid amplification of cDNA ends.
     Their catalytic domain was identical to that of PDE11A1 (490
     amino acids) reported during the course of this study. However, the cDNAs
     we isolated had N termini distinct from PDE11A1, indicating two
     novel N-terminal variants of PDE11A. PDE11A3 cDNA
     encoded a 684-amino acid protein including one complete and one incomplete
     GAF domain in the N-terminal region. PDE11A4 was composed of
     934 amino acids including two complete GAF domains and shared 630
     C-terminal amino acids with {\tt PDE11A3} but had a distinct N
     terminus contg. the putative phosphorylation sites for cAMP- and
     cGMP-dependent protein kinases. PDE11A3 transcripts were
     specifically expressed in testis, whereas PDE11A4 transcripts
     were particularly abundant in prostate. Recombinant PDE11A4 expressed in COS-7 cells hydrolyzed cAMP and cGMP with Km values of 3.0
     and 1.4 .mu.M, resp., and the Vmax value with cAMP was almost twice that
     with cGMP. Although PDE11A3 showed the same Km values as
     PDE11A4, the relative Vmax values of PDE11A3 were
     approx. one-sixth of those of PDE11A4. PDE11A4, but
     not PDE11A3, was phosphorylated by both cAMP- and cGMP-dependent
     protein kinases in vitro. Thus, the PDE11A gene undergoes
     tissue-specific alternative splicing that generates structurally and
     functionally distinct gene products. PDE11A4 is sensitive to
     dipyridamole, with an IC50 of 0.36 and 0.34 .mu.M, for cAMP and cGMP, and
     to zaprinast, with an IC50 of 18 and 11 .mu.M for cAMP and cGMP.
     PDE11A3 demonstrated similar pattern of inhibitor sensitivity.
     Rat homologs were also cloned.
                       KIND DATE
     PATENT NO.
                                               APPLICATION NO. DATE
     WO 2001046436
                        A1 20010628
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MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TT, UA, US, UZ, VN,
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ANSWER 2 OF 21 CAPLUS COPYRIGHT 2003 ACS

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- L9 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2003 ACS
- AN 2001:207980 CAPLUS
- DN 134:248839

PΙ

- TI Protein and cDNA sequences of a novel human cyclic nucleotide phosphodiesterase PDEXV (PDE11A3) and uses thereof in therapy and drug screening
- SO Eur. Pat. Appl., 44 pp. CODEN: EPXXDW
- IN Fidock, Mark David; Robas, Nicola Melanie
- AB This invention provides protein and cDNA sequences for a newly identified human cyclic nucleotide phosphodiesterase, designated PDEXV (PDE11A3), which is believed to be a truncated version of PDE11A1. The invention further relates to methods for utilizing PDEXV in drug screening assays and in therapy directed against diseases assocd. with inappropriate PDEXV activity or levels.

PATENT NO. KIND DATE APPLICATION NO. DATE

EP 1085089 A2 20010321 EP 2000-307981 20000914

EP 1085089 A3 20010509
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
JP 2001136987 A2 20010522 JP 2000-279032 20000914

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          62816 S PHOSPHODIESTERASE?
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L3
             17 S L3 AND PDE11?
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L5
             17 SORT L4 PY
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     ANSWER 1 OF 1 CAPLUS COPYRIGHT 2003 ACS
AN
     2001:207980 CAPLUS
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     134:248839
TI
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     EP 1085089
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     EP 1085089
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             IE, SI, LT, LV, FI, RO
    JP 2001136987
                       A2
                             20010522
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